

## REMARKS

Claims 1, 2, 4, 5, 8, 13-15, 18, and 20-22 have been amended, claims 23-35 have been previously withdrawn, and claims 36-40 have been added. As result, claims 1-22 and 36-40 are pending in the patent application.

The pending claims include one or more features that are not taught or suggested by the applied references. For example, with respect to independent claim 1, none of the cited references, when combined or taken alone, at least do not teach the following features: measuring a first depth of the etch at a first location in a first preselected region of a plurality of preselected regions of the semiconducting substrate, wherein each of the plurality of preselected regions of the semiconducting substrate has an associated temperature adjusting element; providing an indication to the temperature adjusting element associated with the first preselected region to adjust the temperature in response to the first depth being different from the desired depth; and adjusting the temperature of at least a portion of the first preselected region in response to receiving the indication. Similarly, the other claims also include features that are not taught by the applied references, when taken alone or in combination. Thus, because one or more of the claimed features are missing from the applied references, the pending claims are allowable.

Moreover, it is respectfully submitted that the pending claims are not obvious in view of Bukhman and Bollinger. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, the prior art reference (or references when combined) must teach or suggest all the claim limitations. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). Second, there

must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. That is, there must be something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561 (Fed. Cir. 1986). In fact, the absence of a suggestion to combine is dispositive in an obviousness determination. *Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573 (Fed. Cir. 1997). The mere fact that the prior art can be combined or modified does not make the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990); M.P.E.P. § 2143.01. Third, there must be a reasonable expectation of success. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991); M.P.E.P. § 2142. A recent Federal Circuit case emphasizes that, in an obviousness situation, the prior art must disclose each and every element of the claimed invention, and that any motivation to combine or modify the prior art must be based upon a suggestion in the prior art. *In re Lee*, 61 U.S.P.Q.2d 143 (Fed. Cir. 2002). Conclusory statements regarding common knowledge and common sense are insufficient to support a finding of obviousness. *Id.* at 1434-35.

In the instant case, the Examiner fails to provide the requisite motivation to substantiate such alleged obviousness. The Examiner merely states that it would have been obvious to modify Buckhman in view of Bollinger by comparing the first depth to a desired depth because “it hep us to determine whether we should stop or continue with the etching process.” It is well-

settled, however, that references must provide some motivation or reason for one of ordinary skill in the art to make the necessary changes in the disclosed devices or methods. As noted above, the mere fact that references may be modified in the direction of the claimed invention does not make the modifications obvious unless the references expressly or impliedly teach or suggest the desirability of the modifications. *In re Gordon*, 221 USPQ 1125, 1127 (Fed. Cir. 1984); *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. App. 1985); *Ex parte Chicago Rawhide Mfg. Co.*, 223 USPQ 351, 353 (Bd. App. 1984). Indeed, the Federal Circuit stated:

...To draw on hindsight knowledge of the patented invention, when the prior art does not contain or suggest that knowledge, is to use the invention as a template for its own reconstruction--an illogical and inappropriate process by which to determine patentability. *W.L. Gore & Assoc. v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). The invention must be viewed not after the blueprint has been drawn by the inventor, but as it would have been perceived in the state of the art that existed at the time the invention was made. *Interconnect Planning Corp. v. Feil*, 774 F.2d 1132, 1138, 227 USPQ 543, 547 (Fed. Cir. 1985).

*Sensonics Inc. v. Aerasonic Corp.*, 38 USPQ2d 1551, 1554 (Fed. Cir. 1996).

Applicants submit that the only motivation to modify Buckhman as alleged by the Examiner is solely based upon Applicants' own disclosure. It is respectfully submitted that such impermissible hindsight relied upon by the Examiner does not provide a proper basis for such alleged obviousness.

With respect to claims 9-12 and 19-22, the Examiner, in an Office Action dated April 23, 2003, argues that “[i]t is known both in math and statistics that the average, the median, the minimum, the maximum must exist and can be calculated if a plurality of data point is known.” Because the Office **cites no references** to support this “obviousness” assertion, the Applicants infer that the Examiner makes this assertion based on **personal knowledge**. However, no **supporting affidavit** has been made of record. The Applicants respectfully request that prior art

be provided to substantiate this "obviousness" assertion or that an **affidavit** be filed in accordance with **37 C.F.R. § 1.104(d)(2)**, which states (emphasis added):

(2) When a rejection in an application is based on facts **within the personal knowledge** of an employee of the Office, the data shall be as specific as possible, and the **reference must be supported, when called for by the applicant, by the affidavit of such employee**, and such affidavit shall be subject to contradiction or explanation by the affidavits of the applicant and other persons.

Consequently, the Applicants respectfully and seasonably request the Office to either

(1) **cite a reference** in support of this position, or (2) **provide a Rule 104(d)(2) affidavit** from the Examiner supporting any **facts within the personal knowledge of the Examiner**, as also set forth in **M.P.E.P. § 2144.03**. Furthermore, the Applicants request the Office to provide the requisite motivation to substantiate the alleged obviousness.

The newly added claims are also allowable for one or more reasons presented above.

If for any reason the Examiner finds the application other than in condition for allowance, the undersigned attorney hereby requests an interview with the Examiner to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,



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